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**Section I:****AMENDMENT UNDER 37 CFR §1.121 to the  
CLAIMS****Claim 1 (currently amended):**

A method for synchronization and propagation of metadirectory updates, said metadirectory comprising a plurality of joined heterogeneous data sources, said data sources comprising one or more entries having one or more attributes, said method comprising the steps of:

receiving by a joiner plug-in a first update operation for a first entry in a first data source;

selecting by said joiner plug-in a best match entry of said metadirectory to said first entry in the first data source; [[and]]

applying by said joiner plug-in said update operation to a local temporary copy of said best matching metadirectory entry;

comparing by said joiner plug-in said updated local temporary copy to an original unmodified entry in said metadirectory;

responsive to said step of comparing finding that one or more differences occurred due to the application of said update operation, creating by said joiner plug-in a differential update command containing only changed fields in said updated temporary copy, thereby omitting operations resulting in no net change to said updated temporary copy; and

propagating [[a]] by said joiner plug-in said differential update command to at least one other joined data source to implement said first update operation.

**Claim 2 (original):**

The method as set forth in Claim 1 wherein said step of receiving a first update operation comprises receiving an LDAP change operation.

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The method as set forth in Claim 1 wherein said step of selecting a best match entry of said metadirectory comprises the step of consulting a synonym list to resolve multiple matches.

**Claim 4 (original):**

The method as set forth in Claim 1 wherein said step of selecting a best match entry of said metadirectory comprises the step of performing a weighted scoring analysis across two or more attributes.

**Claim 5 (original):**

The method as set forth in Claim 1 wherein said step of propagating a differential update command comprises the step of transmitting an LDAP change operation.

**Claim 6 (cancelled).**

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A computer readable medium encoded with software for synchronization and propagation of metadirectory updates, said metadirectory comprising a plurality of joined heterogeneous data sources, said data sources comprising one or more entries having one or more attributes, said software causing one or more processors to perform the steps of:

receiving by a joiner plug-in a first update operation for a first entry in a first data source;

selecting by said joiner plug-in a best match entry of said metadirectory to said first entry in the first data source; [[and]]

applying by said joiner plug-in said update operation to a local temporary copy of said best matching metadirectory entry;

comparing by said joiner plug-in said updated local temporary copy to an original unmodified entry in said metadirectory;

responsive to said step of comparing finding that one or more differences occurred due to the application of said update operation, creating by said joiner plug-in a differential update command containing only changed fields in said updated temporary copy, thereby omitting operations resulting in no net change to said updated temporary copy; and

propagating [[a]] by said joiner plug-in said differential update command to at least one other joined data source to implement said first update operation.

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The computer readable medium as set forth in Claim 7 wherein said software for receiving a first update operation comprises software for receiving an LDAP change operation.

**Claim 9 (original):**

The computer readable medium as set forth in Claim 7 wherein said software for selecting a best match entry of said metadirectory comprises software for consulting a synonym list to resolve multiple matches.

**Claim 10 (original):**

The computer readable medium as set forth in Claim 7 wherein said software for selecting a best match entry of said metadirectory comprises software for the step of performing a weighted scoring analysis across two or more attributes.

**Claim 11 (original):**

The computer readable medium as set forth in Claim 7 wherein said software for propagating a differential update command comprises software for transmitting an LDAP change operation.

**Claim 12 (canceled).**

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A system for synchronization and propagation of metadirectory updates, said metadirectory comprising a plurality of joined heterogeneous data sources, said data sources comprising one or more entries having one or more attributes, said system comprising:

an update operation receiver disposed in a joiner plug-in adapted to receive a first metadirectory update operation for a first entry in a first data source;

a matcher disposed in said joiner plug-in adapted to select a best match entry of said metadirectory to said first entry in the first data source; [[and]]

a comparitor disposed in said joiner plug-in adapted to apply said first update operation to a local temporary copy of said best matching metadirectory entry, and to detect differences between said updated local temporary copy to an original unmodified entry in said metadirectory;

a differential update command creator adapted to create a second metadirectory update command responsive to identification of one or more differences detected by said comparitor, said differential update command containing only update command pertaining to changed fields in said updated temporary copy, thereby omitting operations resulting in no net change to said updated temporary copy;

an update propagator disposed in said joiner plug-in adapted to propagate [[a]] said differential update command to at least one other joined data source to implement said first update operation.

**Claim 14 (original):**

The system as set forth in Claim 13 wherein said update operation receiver is adapted to receive an LDAP change operation.

**Claim 15 (original):**

The system as set forth in Claim 13 wherein said matcher is adapted to consult a synonym list to resolve multiple matches.

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The system as set forth in Claim 13 wherein said matcher is adapted to perform a weighted scoring analysis across two or more attributes.

**Claim 17 (original):**

The system as set forth in Claim 13 wherein said update propagator is adapted to transmit an LDAP change operation.

**Claim 18 (canceled).**

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Claim 19 (new):

A method comprising the steps of:

receiving by a joiner plug-in a first metadirectory update operation for a first entry in a first data source, said metadirectory comprising a plurality of joined heterogeneous data sources, said data sources comprising one or more entries having one or more attributes;

selecting by said joiner plug-in a best match entry of said metadirectory to said first entry in the first data source;

applying by said joiner plug-in said update operation to a local temporary copy of said best matching metadirectory entry;

suppressing propagation by said joiner plug-in of said updated temporary copy of said metadirectory entry to other joined datasources within a metadirectory;

comparing by said joiner plug-in said updated local temporary copy to an original unmodified entry in said metadirectory;

identifying by said joiner plug-in one or more differences resulting from said step of comparing;

responsive to identifying no differences, deleting by said joiner plug-in said updated temporary copy;

responsive to identifying one or more differences, creating by said joiner plug-in a differential update command containing only changed fields in said updated temporary copy, thereby omitting operations resulting in no net change to said updated temporary copy; and

propagating by said joiner plug-in said differential update command to at least one other joined data source to implement said first update operation.